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\*Admitted only in Maryland  
\*Admitted only in Virginia  
\*Practice Limited to  
Federal Agencies



February 24, 2004

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**INTERNET ADDRESS:**  
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MAR 02 2004

**Art Unit 1646**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Utility Patent Application  
Application No. 09/827,937; Filed: April 9, 2001  
For: **Human G-Protein Coupled Receptors**  
Inventors: Li *et al.*  
Our Ref: 1488.1220003/EKS/PAJ

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Fee Transmittal;
2. First Supplemental Information Disclosure Statement Filing Under 37 C.F.R. § 1.97(c);
3. Form PTO-1449 (4 pages) listing fourteen (14) documents;
4. Document Nos. AN1, AO1, AR5, AS5, AT5, AR6, AS6, AT6, AR7, AS7, AT7, AR8, AS8 and AT8;
5. Credit Card Payment Form in the amount of \$180.00 to cover filing fee; and
6. One return postcard.

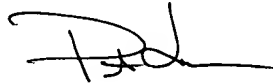
It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents  
February 24, 2004  
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

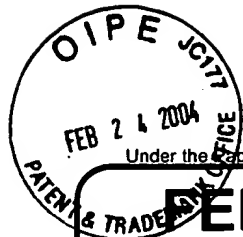
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read 'P. Jackman', with a horizontal line extending to the right.

Peter A. Jackman  
Attorney for Applicants  
Registration No. 45,986

PAJ/aye  
Enclosures

232784-1



MAR 02 2004

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 180.00

**Complete if Known**

Application Number	09/827,937
Filing Date	April 9, 2001
First Named Inventor	Yi Li
Examiner Name	Basi, N.
Art Unit	1646
Attorney Docket No.	1488.1220003/EKS/PAJ

**METHOD OF PAYMENT (check all that apply)**☐ Check ☒ Credit card ☐ Money Order ☒ Other\*\* ☐ None☐ \*\*Charge any deficiencies or credit any overpayments in Deposit Account: the fees to Deposit Acct. No. 19-0036Deposit Account Number  
Deposit Account Name

19-0036

Sterne Kessler, Goldstein &amp; Fox P.L.L.C.

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 0.00

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent	- 20 **	X	
Multiple Dependent	- 3 **	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	180.00
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 180.00

**SUBMITTED BY**

(Complete if applicable)

Name (Print/Type)	Peter A. Jackman	Registration No. (Attorney/Agent)	45,986	Telephone	(202) 371-2600
Signature		Date	2/24/04		

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



MAR 02 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Li *et al.*

Appl. No.: 09/827,937

Filed: April 9, 2001

For: **Human G-Protein Coupled  
Receptors**

Confirmation No.: 8058

Art Unit: 1646

Examiner: Basi, N.

Atty. Docket: 1488.1220003/EKS/PAJ

**First Supplemental Information Disclosure Statement Filing Under 37  
C.F.R. § 1.97(c)**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this First Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Information Disclosure Statement filed on August 21, 2001 in connection with the above-captioned application. Copies of the documents are provided.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

02/27/2004 JBALINAM 00000070 09827937

01 FC:1806

180.00 OP

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$180.00 in payment of the fee under 37 C.F.R. § 1.17(p).

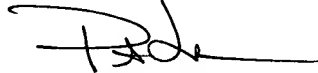
Documents **AN1**, **AO1**, and **AS8** were cited in a European search report (Document **AT8**) by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO 1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

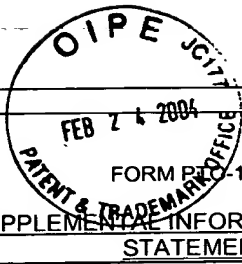
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Peter A. Jackman  
Attorney for Applicants  
Registration No. 45,986

Date: Feb. 24, 2004

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE  
STATEMENT

FORM PTO-1449

ATTY. DOCKET NO.  
1488.1220003/EKS/PAJAPPLICATION NO.  
09/827,937FIRST NAMED INVENTOR  
Li *et al.*FILING DATE  
March 9, 2001ART UNIT  
1646

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
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	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

MAR 02 2004

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL1						Yes No
	AM1						Yes No
	AN1	WO 91/15583 A1	10/17/1991	WIPO			Yes No
	AO1	WO 99/35106 A2	07/15/1999	WIPO			Yes No
	AP1						Yes No

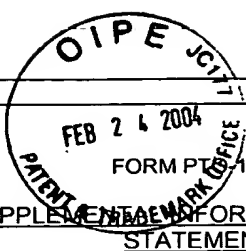
## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	5	Birkenbach, M., <i>et al.</i> , "Epstein-Barr Virus-Induced Genes: First Lymphocyte-Specific G Protein-Coupled Peptide Receptors," <i>J. Virol.</i> 67:2209-2220, American Society for Microbiology (1993)
	AS	5	Connelly, K.P. and De Witt, L.D., "Neurologic Complications of Infectious Mononucleosis," <i>Ped. Neurol.</i> 10:181-184, Elsevier Science Inc. (1994)
	AT	5	Grässer, F.A., <i>et al.</i> , "Monoclonal Antibodies Directed Against the Epstein-Barr Virus-Encoded Nuclear Antigen 1 (EBNA1): Immunohistologic Detection of EBNA1 in the Malignant Cells of Hodgkin's Disease," <i>Blood</i> 84:3792-3798, The American Society for Hematology (1994)

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



**FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

ATTY. DOCKET NO.  
1488.1220003/EKS/PAJ

APPLICATION NO.  
09/827,937

FIRST NAMED INVENTOR  
Li *et al.*

FILING DATE  
March 9, 2001

ART UNIT  
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	AA						
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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

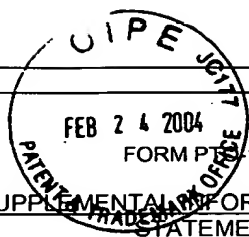
AR	<u>6</u>	Kikuta, H., <i>et al.</i> , "Detection of Epstein-Barr virus DNA in cardiac and aortic tissues from chronic, active Epstein-Barr virus infection associated with Kawasaki disease-like coronary artery aneurysms," <i>J. Ped.</i> 123:90-92, Mosby-Year Book, Inc. (1993)
AS	<u>6</u>	Oliveira, L., <i>et al.</i> , "A common motif in G-protein-coupled seven transmembrane helix receptors," <i>J. Comp.-Aided Molec. Des.</i> 7:649-658, ESCOM Science Publishers B.V. (1993)
AT	<u>6</u>	Probst, W.C., <i>et al.</i> , "Sequence Alignment of the G-Protein Coupled Receptor Superfamily," <i>DNA &amp; Cell Biol.</i> 11:1-20, Mary Ann Liebert, Inc., Publishers (1992)

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09/827,937

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FIRST SUPPLEMENTAL INFORMATION DISCLOSURE  
STATEMENT

U.S. PATENT DOCUMENTS

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	AL						Yes No
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	AO						Yes No
	AP						Yes No

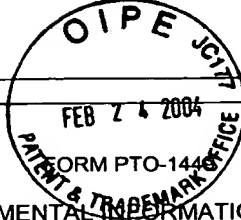
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>7</u>	Reiger, R., <i>et al.</i> , , <i>Glossary of Genetics and Cytogenetics</i> , 4 <sup>th</sup> Ed., Reiger, R., <i>et al.</i> , eds., Springer-Verlag, New York, NY, pp. 17-19 (1976)
	AS	<u>7</u>	Schweickart, V.L., <i>et al.</i> , "Cloning of Human and Mouse EBI1, a Lymphoid-Specific G-Protein-Coupled Receptor Encoded on Human Chromosome 17q12-q21.2," <i>Genomics</i> 23:643-650, Academic Press, Inc. (1994)
	AT	<u>7</u>	Tyson, A.A., Jr., <i>et al.</i> , "Acute Epstein-Barr Virus Myocarditis Simulating Myocardial Infarction With Cardiogenic Shock," <i>South. Med. J.</i> 82:1184-1187, Southern Medical Association (1989)

EXAMINER

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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	8	Van Brocklyn, J.R., <i>et al.</i> , "Sphingosine-1-phosphate is a ligand for the G protein-coupled receptor EDG-6," <i>Blood</i> 95:2624-2629, American Society for Hematology (April 2000)
AS	8	Database EMBL, Accession No. AA254425, Marra, M., <i>et al.</i> , (first available March 1997)
AT	8	Partial European Search Report for European Application No. 03 01 5456, mailed December 17, 2003, European Patent Office, Netherlands

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.